Online Assessment Tracking Database

Sam Houston State University (SHSU)
2014 - 2015

Geographic Information Systems MS

Goal

Deliver A Curriculum With Appropriate Discipline Specific Knowledge

Students will learn the appropriate advance Applied GIS knowledge and skills.

Objective (L)

Demonstrate Advanced Applied GIS Knowledge And Skills

Each student will demonstrate the ability to communicate knowledge of advanced applied GIS.

Indicator

Mastery Of Advanced Applied GIS Knowledge - Written Comprehensive Exams

All graduate students will demonstrate a mastery of applied GIS knowledge through a set of written graduate comprehensive examinations, administered by a faculty committee. The examination will consist of questions about the practical and theoretical basis for the application of Geographic Information Systems and Remote Sensing techniques to real world problems. A committee of faculty members with expertise in the subject areas will evaluate students' performance and give a mark of Fail, Pass, or High Pass in each examined area.

Criterion

80% First Time Pass Rate For Written Comprehensive Exams

Each student needs to earn at least a "Pass" mark in each examined area to pass the written comprehensive exams. Each student is allowed two attempts. Faculty expect that at least 80% of graduate students will pass their exam on their first attempt. 100% will pass on their second attempt.

Finding

Performance On Comprehensive Exam

6 students took the comprehensive exam in Fall 2014. Each student formed a comprehensive examination committee comprised of 3 GIS graduate faculty members selected by individual student. Thus the comprehensive exam had 3 sections based on questions submitted by 3 comprehensive exam committee members.

2 students scored 'PASS' in all three sections. 2 students scored 'PASS' in two sections and 'PARTIAL PASS' in one section. 1 student scored 'HIGH PASS' in one section, 'PASS' in one section and 'PARTIAL PASS' in one section. One student scored 'HIGH PASS' in two sections and 'PASS' in one section. Thus, 3 students scored 'PARTIAL PASS' in one section, 2 students scored 'HIGH PASS' in atleast one section and the remaining scored 'PASS' in all sections. All the three students with a 'PARTIAL PASS' scored it in same section and on re-taking that section passed it. Thus in Fall 2014 all the 6 students who took the comprehensive exam finally passed the exam with 2 students scoring 'HIGH PASS' in atleast one section.

In Spring 2015 6 students took the

comprehensive exam. 3 students scored 'HIGH PASS' with one student scoring 'HIGH PASS' in all three sections and 2 students with a 'HIGH PASS' in one section. One student 'FAILED' two sections and will be re-taking the two sections in Fall 2015.

Action **Improving On Comprehensive Performance**

Compared to previous years more students have scored 'HIGH PASS' in one or more section. All 3 student students who have scored 'PARTIAL PASS' was in the section related to Spatial Analysis. GIS faculty have introduced more introductory topics on Spatial Analysis in order to reinforce student knowledge and skillset and make them more proficient in that particular subject matter.

Previous Cycle's "Plan for Continuous Improvement"

The Applied GIS faculty has continued to work to improve the quality of the program. The addition of a new faculty member in 2013, and the addition of new courses, have offered the opportunity to expand the scope of expertise available across the curriculum. Accordingly, we plan to broaden the subject matter and the range of skills incorporated within comprehensive examinations. In short, we plan to refine the comprehensive exam so that additional subject matter is explicitly assessed.

Please detail the elements of your previous "Plan for Continuous Improvement" that were implemented. If elements were not implemented please explain why, along with any contextual challenges you may have faced that prevented their implementation.

3 new GIS graduate courses were offered in Spring 2015 and another new GIS graduate course was offered in summer 2015. These 4 new graduate courses that were offered in the 2014-2015 academic year covered four distinct areas of GIS thereby providing GIS graduate students an opportunity to enhance their GIS skillsets and making them more marketable. Also, starting Spring 2015 graduate students on thesis track are required to take a class on Research Methods. This will ensure that students who are on thesis track have the required skill sets to effectively conduct research and successfully complete their thesis work.

Plan for Continuous Improvement - Please detail your plan for improvement that you have developed based on what you learned from your 2014 - 2015 Cycle Findings.

The graduate GIS faculty continues to adopt strategies in order to improve the quality of the program. As number of GIS graduate students increases, we plan to broaden the subject matter and the range of skill sets that GIS graduate students learn. GIS faculty will continue to work on improving student knowledge related to Spatial Analysis. Another element of the graduate program that we plan to strengthen is the thesis track. In Fall 2014 the GIS graduate committee introduced a policy that required all graduate students on thesis track to take a class on Research Methods. This will ensure that students who are on thesis track have the required skill sets to effectively conduct research and successfully complete their thesis work. As part of continuous improvement the committee will adopt other approaches to strengthen the thesis track